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CHARLES D. WALCOTT, DIRECTOR

THE
AREAS OF THE UNITED STATES, THE
STATES, AND THE TERRITORIES

BY

HENRY GANNETT



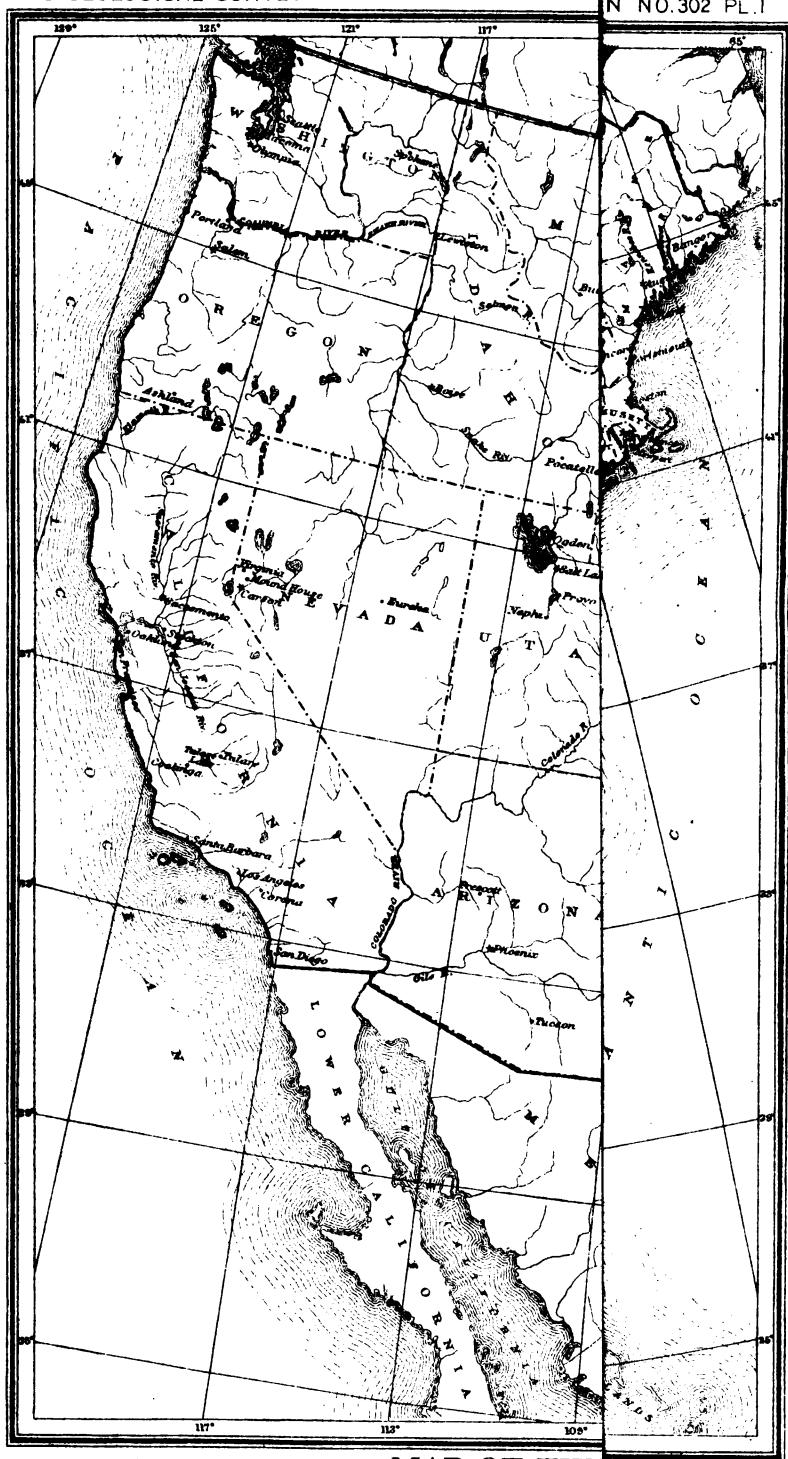
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1906

ILLUSTRATION.

PLATE I. Map of the United States, defining the adopted limits of the gross
area

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MAP OF THE BIEN & CO. LITH. N.Y.

THE AREAS OF THE UNITED STATES, THE STATES, AND THE TERRITORIES.

By HENRY GANNETT.

In 1881 the Census Office published in an extra bulletin tables showing the areas of the United States and of the several States and Territories. The measurements and computations upon which these tables were based were made with care, according to methods described in the bulletin, and the results probably represented the areas as closely as they could be determined from the maps and charts of that time. In 1899 the General Land Office printed similar tables, which were also prepared with great care and thoroughness.

The tables presented in these two publications differ from each other. Most of the differences are trifling, amounting to only a few square miles or a small fraction of 1 per cent, being well within the limits of error of the planimeter and of the maps used. Some of them, however, are considerable, and a few are explained by the fact that more recent maps, which changed the position of boundaries between States, had been used by the Land Office, and its measurement was, therefore, more nearly correct. Other discrepancies arose from differences in determining the coast lines; as an example of this, the Land Office measurement of the State of Washington included half of the Strait of Juan de Fuca, while that of the Census Office did not, involving a difference in area of 1,500 square miles.

Realizing the desirability of the Government issuing but one statement of areas of the States and Territories, the offices concerned, through their representatives, Mr. Frank Bond, chief draftsman of the General Land Office, Mr. C. S. Sloane, geographer of the Census Office, and myself, representing the Geological Survey, have been at work for several months in the endeavor to come to an agreement on these figures, and in the course of our discussion many new measurements have been made from the most recent and best maps. An agreement has been reached, the results of which are set forth in the accompanying table.

By this adjustment the area of the United States proper is increased over the Census Office figures by 1,188 square miles, or about three one-hundredths of 1 per cent.

The question, "What constitutes the area of the United States?" is by no means a simple one. Jurisdiction extends to a line 3 nautical miles from the shore, but this strip of sea can not properly be regarded as a part of the country. Supposing our country to be restricted to the sea and lake coast, there remains a question regarding the bays and estuaries. To what extent should the coast line be followed strictly, and where should we begin to jump across the indentations made by the sea? In this matter one can only follow his own judgment, making in each case as natural a decision as possible, as no definite criterion can be established. This applies also to those States bordering the sea and the Great Lakes.

The method of measurement may be characterized in a few words. The areas of all square degrees included entirely within a State or the United States are taken from tables of such areas. Where a square degree is crossed by a boundary line, so that only part of it is included, both the part included and that excluded are measured from the best maps by planimeter, and the correctness of the measurement is tested by comparing their sum with the tabular area of the square degree.

The entire boundary of the United States has now been mapped or charted with accuracy, so that, aside from uncertainties due to the interpretation of the coast line, there can be little or no question as to the correctness of the measurement of the country as a whole. The situation as regards the individual States is not so satisfactory, however, although the boundaries of most of them are now well mapped. Certain States are bounded by parallels and meridians, and the ascertainment of their areas is merely a matter of reference to tables of areas of square degrees, assuming that the boundary lines were accurately run and marked in accordance with the statute. The boundaries of a few of the States, however, have not been accurately mapped, and it is probable that changes will be made in the computed areas of these States.

The area of Alaska, measured in this office from the large Coast Survey chart, is subject to considerable modification in the future as the position of the coast line becomes better known.

The area given for the Philippine Islands is that determined by the Coast Survey of that archipelago, prepared at the instance of the Philippine Census and published in that report. It also is subject to modification as accurate charts of the archipelago are made.

The areas of Hawaii and Porto Rico are probably subject to only slight change, as the charts from which they were measured are quite accurate.

The areas given for the other small possessions of the United States—Guam, Samoa, and the Panama Canal strip—will probably be changed in the future as their limits become more correctly defined.

Areas, in square miles, of the States and Territories.

State or Territory.	Land surface.	Water surface.	Total area.
Alabama.....	51, 279	719	51, 998
Arizona.....	113, 840	116	113, 956
Arkansas.....	52, 525	810	53, 335
California.....	156, 092	2, 205	158, 297
Colorado.....	103, 658	290	103, 948
Connecticut.....	4, 820	145	4, 965
Delaware.....	1, 965	405	2, 370
District of Columbia.....	60	10	70
Florida.....	54, 861	3, 805	58, 666
Georgia.....	58, 725	540	59, 265
Idaho.....	83, 779	534	84, 313
Illinois.....	56, 002	663	56, 665
Indiana.....	35, 885	469	36, 354
Indian Territory.....	30, 790	419	31, 209
Iowa.....	55, 586	561	56, 147
Kansas.....	81, 774	384	82, 158
Kentucky.....	40, 181	417	40, 598
Louisiana.....	45, 409	3, 097	48, 506
Maine.....	29, 895	3, 145	33, 040
Maryland.....	9, 941	2, 386	12, 327
Massachusetts.....	8, 039	227	8, 266
Michigan.....	57, 480	500	57, 980
Minnesota.....	80, 858	3, 824	84, 682
Mississippi.....	46, 362	503	46, 865
Missouri.....	68, 727	693	69, 420
Montana.....	145, 776	796	146, 572
Nebraska.....	76, 808	712	77, 520
Nevada.....	109, 821	869	110, 690
New Hampshire.....	9, 031	310	9, 341
New Jersey.....	7, 514	710	8, 224
New Mexico.....	122, 503	131	122, 634
New York.....	47, 654	1, 550	49, 204
North Carolina.....	48, 740	3, 686	52, 426
North Dakota.....	70, 183	654	70, 837
Ohio.....	40, 740	300	41, 040
Oklahoma Territory.....	38, 624	224	38, 848

Areas, in square miles, of the States and Territories—Continued.

State or Territory.	Land surface.	Water surface.	Total area.
Oregon	95, 607	1, 092	96, 699
Pennsylvania	44, 832	294	45, 126
Rhode Island	1, 067	181	1, 248
South Carolina	30, 495	494	30, 989
South Dakota	76, 868	747	77, 615
Tennessee	41, 687	335	42, 022
Texas	262, 398	3, 498	265, 896
Utah	82, 184	2, 806	84, 990
Vermont	9, 124	440	9, 564
Virginia	40, 262	2, 365	42, 627
Washington	66, 836	2, 291	69, 127
West Virginia	24, 022	148	24, 170
Wisconsin	55, 256	810	56, 066
Wyoming	97, 594	320	97, 914
	2, 974, 159	52, 630	3, 026, 789
Alaska			590, 884
Guam			210
Hawaii			6, 449
Panama Canal Zone			474
Philippine Islands			115, 026
Porto Rico			3, 435
Tutuila Group, Samoa			77
Total			3, 743, 344

Owing to their location adjoining the Great Lakes, the States enumerated below contain approximately an additional number of square miles as follows:

Illinois	1,674 square miles of Lake Michigan.
Indiana	230 square miles of Lake Michigan.
Michigan	16,653 square miles of Lake Superior.
	12,922 square miles of Lake Michigan.
	9,925 square miles of Lake Huron.
	460 square miles of Lakes St. Clair and Erie.
Minnesota	2,514 square miles of Lake Superior.
New York	3,140 square miles of Lakes Ontario and Erie.
Ohio	3,443 square miles of Lake Erie.
Pennsylvania	891 square miles of Lake Erie.
Wisconsin	2,378 square miles of Lake Superior.
	7,500 square miles of Lake Michigan.

In addition to the water areas noted above, California claims jurisdiction over all Pacific waters lying within 3 English miles of her coast; Oregon claims jurisdiction over a similar strip of the Pacific Ocean 1 marine league in width between latitude 42° N. and the mouth of the Columbia River; and Texas claims jurisdiction over a strip of Gulf water 3 leagues in width, adjacent to her coast between the Rio Grande and the Sabine River.

CLASSIFICATION OF THE PUBLICATIONS OF THE UNITED STATES GEOLOGICAL SURVEY.

[Bulletin No. 302.]

The publications of the United States Geological Survey consist of (1) Annual Reports; (2) Monographs; (3) Professional Papers; (4) Bulletins; (5) Mineral Resources; (6) Water-Supply and Irrigation Papers; (7) Topographic Atlas of United States—folios and separate sheets thereof; (8) Geologic Atlas of United States—folios thereof. The classes numbered 2, 7, and 8 are sold at cost of publication; the others are distributed free. A circular giving complete lists may be had on application.

Most of the above publications may be obtained or consulted in the following ways:

1. A limited number are delivered to the Director of the Survey, from whom they may be obtained, free of charge (except classes 2, 7, and 8), on application.
2. A certain number are delivered to Senators and Representatives in Congress, for distribution.
3. Other copies are deposited with the Superintendent of Documents, Washington, D. C., from whom they may be had at prices slightly above cost.
4. Copies of all Government publications are furnished to the principal public libraries in the large cities throughout the United States, where they may be consulted by those interested.

The Professional Papers, Bulletins, and Water-Supply Papers treat of a variety of subjects, and the total number issued is large. They have therefore been classified into the following series: A, Economic geology; B, Descriptive geology; C, Systematic geology and paleontology; D, Petrography and mineralogy; E, Chemistry and physics; F, Geography; G, Miscellaneous; H, Forestry; I, Irrigation; J, Water storage; K, Pumping water; L, Quality of water; M, General hydrographic investigations; N, Water power; O, Underground waters; P, Hydrographic progress reports. This paper is the fifty-third in Series F, the complete list of which follows (all are bulletins thus far except Professional Paper 45):

SERIES F, GEOGRAPHY.

5. Dictionary of altitudes in United States, by Henry Gannett. 1884. 325 pp. (Out of stock; see Bulletin 274.)
6. Elevations in Dominion of Canada, by J. W. Spencer. 1884. 43 pp. (Out of stock.)
13. Boundaries of United States and of the several States and Territories, with historical sketch of territorial changes, by Henry Gannett. 1885. 135 pp. (Out of stock; see Bulletin 226.)
48. On form and position of sea level, by R. S. Woodward. 1888. 88 pp. (Out of stock.)
49. Latitudes and longitudes of certain points in Missouri, Kansas, and New Mexico, by R. S. Woodward. 1889. 133 pp.
50. Formulas and tables to facilitate the construction and use of maps, by R. S. Woodward. 1889. 124 pp. (Out of stock.)
70. Report on astronomical work of 1889 and 1890, by R. S. Woodward. 1890. 79 pp.
72. Altitudes between Lake Superior and Rocky Mountains, by Warren Upham. 1891. 229 pp.
76. Dictionary of altitudes in United States (second edition), by Henry Gannett. 1891. 393 pp. (Out of stock; see Bulletin 274.)
115. Geographic dictionary of Rhode Island, by Henry Gannett. 1894. 31 pp.
116. Geographic dictionary of Massachusetts, by Henry Gannett. 1894. 126 pp.
117. Geographic dictionary of Connecticut, by Henry Gannett. 1894. 67 pp.
118. Geographic dictionary of New Jersey, by Henry Gannett. 1894. 131 pp.
122. Results of primary triangulation, by Henry Gannett. 1894. 412 pp., 17 pls. (Out of stock.)
123. Dictionary of geographic positions, by Henry Gannett. 1895. 183 pp., 1 map. (Out of stock.)
154. Gazetteer of Kansas, by Henry Gannett. 1898. 246 pp., 6 pls.

160. Dictionary of altitudes in United States (third edition), by Henry Gannett. 1899. 775 pp. (Out of stock; see Bulletin 274.)
166. Gazetteer of Utah, by Henry Gannett. 1900. 43 pp., 1 map.
169. Altitudes in Alaska, by Henry Gannett. 1900. 13 pp.
170. Survey of boundary line between Idaho and Montana from international boundary to crest of Bitterroot Mountains, by R. U. Goode. 1900. 67 pp., 14 pls.
171. Boundaries of United States and of the several States and Territories, with outline of history of all important changes of territory (second edition), by Henry Gannett. 1900. 142 pp., 53 pls. (Out of stock; see Bulletin 226.)
174. Survey of northwestern boundary of United States, 1857-1861, by Marcus Baker. 1900. 78 pp., 1 pl.
175. Triangulation and spirit leveling in Indian Territory, by C. H. Fitch. 1900. 141 pp., 1 pl.
181. Results of primary triangulation and primary traverse, fiscal year 1900-1901, by H. M. Wilson, J. H. Renshaw, E. M. Douglas, and R. U. Goode. 1901. 240 pp., 1 map.
183. Gazetteer of Porto Rico, by Henry Gannett. 1901. 51 pp.
185. Results of spirit leveling, fiscal year 1900-1901, by H. M. Wilson, J. H. Renshaw, E. M. Douglas, and R. U. Goode. 1901. 219 pp.
187. Geographic dictionary of Alaska, by Marcus Baker. 1901. 446 pp. (Out of stock.)
190. Gazetteer of Texas, by Henry Gannett. 1902. 162 pp., 8 pls. (Out of stock.)
192. Gazetteer of Cuba, by Henry Gannett. 1902. 113 pp., 8 pls. (Out of stock.)
194. Northwest boundary of Texas, by Marcus Baker. 1902. 51 pp., 1 pl.
196. Topographic development of the Klamath Mountains, by J. S. Diller. 1902. 69 pp., 13 pls.
197. The origin of certain place names in the United States, by Henry Gannett. 1902. 280 pp. (Out of stock; see Bulletin 258.)
201. Results of primary triangulation and primary traverse, fiscal year 1901-2, by H. M. Wilson, J. H. Renshaw, E. M. Douglas, and R. U. Goode. 1902. 164 pp., 1 pl.
214. Geographic tables and formulas, compiled by S. S. Gannett. 1903. 284 pp. (Out of stock; see Bulletin 234.)
216. Results of primary triangulation and primary traverse, fiscal year 1902-3, by S. S. Gannett. 1903. 222 pp., 1 pl.
224. Gazetteer of Texas (second edition), by Henry Gannett. 1904. 177 pp., 7 pls.
226. Boundaries of the United States and of the several States and Territories, with an outline of the history of all important changes of territory (third edition), by Henry Gannett. 1904. 145 pp., 54 pls.
230. Gazetteer of Delaware, by Henry Gannett. 1904. 15 pp.
231. Gazetteer of Maryland, by Henry Gannett. 1904. 84 pp.
232. Gazetteer of Virginia, by Henry Gannett. 1904. 159 pp.
233. Gazetteer of West Virginia, by Henry Gannett. 1904. 164 pp.
234. Geographic tables and formulas (second edition), compiled by S. S. Gannett. 1904. 310 pp.
245. Results of primary triangulation and primary traverse, fiscal year 1902-3, by S. S. Gannett. 1904. 328 pp., 1 pl.
248. Gazetteer of Indian Territory, by Henry Gannett. 1904. 70 pp.
258. The origin of certain place names in the United States (second edition), by Henry Gannett. 1905. 334 pp.
- Professional Paper 45. The geography and geology of Alaska, a summary of existing knowledge, by A. H. Brooks, with a section on climate, by Cleveland Abbe, Jr., and a topographic map and description thereof, by R. U. Goode. 1906. 327 pp., 34 pls.
274. A dictionary of altitudes in the United States (fourth edition), compiled by Henry Gannett. 1906. 1072 pp.
276. Results of primary triangulation and primary traverse, fiscal year 1904-5, by S. S. Gannett. 1905. 263 pp., 1 pl.
281. Results of spirit leveling in the State of New York for the years 1896 to 1905, inclusive, by S. S. Gannett and D. H. Baldwin. 1906. 112 pp.
288. Results of spirit leveling in Pennsylvania for the years 1899 to 1905, inclusive, by S. S. Gannett and D. H. Baldwin. 1906. 62 pp.
291. Gazetteer of Colorado, by Henry Gannett. 1906. 185 pp.
299. Geographic dictionary of Alaska, by Marcus Baker; second edition, prepared by James McCormick. 1906. — pp.
302. Areas of the United States, the States, and the Territories, by Henry Gannett. 1906. 9 pp., 1 pl.

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THE DIRECTOR,

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WASHINGTON, D. C.

SEPTEMBER, 1906.

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